

Photometric determinations and sensor-based measurements in one robust hand-held instrument with waterproof housing for all conditions

## CHEMATEST 35

### Water Quality Control

#### Parameters

##### Photometry:

- Disinfectants: free, total and combined chlorine, chlorine dioxide, ozone, bromine and iodine by the DPD method
- Cyanuric acid
- pH: photometric with phenol red

##### Sensor-based:

Digital, maintenance-free sensors with long service life available for

- pH
- Redox potential (ORP)
- Specific conductivity

#### Highest Accuracy

- Individual factory calibration of each photometer
- Verification of photometric accuracy with traceable absorption standards
- Use with SWAN Oxycon liquid reagents for reliable results and easy and time-saving handling

#### User-friendly Operation

- User management and freely configurable sample IDs for comprehensive documentation of results
- Intuitive on-screen instructions; choice between detailed guidance and expert mode for fastest measurements
- Favorites list for quick access to methods

#### Up-to-date Electronics

- Chematest App for data export and instrument configuration via Bluetooth 4.0 LE interface
- Powerful, USB-charged lithium-ion battery for approx. 5000 measurements
- Memory for 2700 data sets



#### Scope of Delivery:

CHEMATEST 35 in carrying case, 2x cuvette holder with integrated sealing lid, 4x glass cuvette, brush for cuvettes, sensor protection cap, 6x cleaning wipe, 125 mL dropper bottle, 10 mL syringe, 2x blister pack for 5 reagent bottles each, USB charging cable, warranty card, quick start guide

#### Reagents:

Sets for 200 determinations of disinfectants / pH:

- Oxycon Pool: free Cl<sub>2</sub>, pH (phenol red)
- Oxycon Chlor: free, total and combined Cl<sub>2</sub>
- Oxycon DES: free Cl<sub>2</sub>, ClO<sub>2</sub>, Br<sub>2</sub>, I<sub>2</sub>
- Oxycon Ozone: O<sub>3</sub>

Set for 40 determinations of cyanuric acid:

- Oxycon CA

#### Accessory:

Verification kit transmission: set of three cuvettes, zero, low and high absorbance

Order Nr.	CHEMATEST 35	A-70.065.035
Sensors:	<input type="checkbox"/> Swansensor pH CT	A-87.160.014
	<input type="checkbox"/> Swansensor ORP CT	A-87.460.014
	<input type="checkbox"/> Swansensor Shurecon CT	A-87.391.014
Accessories:	<input type="checkbox"/> Verification kit transmission	A-85.153.580
	<input type="checkbox"/> Sensor protection cap	A-70.065.634
Reagents and spare parts:	See <a href="http://www.swan.ch">www.swan.ch</a> for details and order numbers	

## Photometric Specifications

Disinfectant	Measuring range / mg L <sup>-1</sup>			Limit of detection (LOD) / mg L <sup>-1</sup>
	Low	Medium	High	
Chlorine (free, total, combined)	0.00 – 2.99	3.0 – 5.9	6 – 10	0.01
Chlorine dioxide	0.00 – 5.49	5.5 – 10.9	11 – 19	0.02
Bromine	0.00 – 6.49	6.5 – 12.9	13 – 23	0.03
Iodine	0.00 – 9.99	10.0 – 19.9	20 – 35	0.05
Ozone	0.000 – 0.499	0.50 – 1.99	2.0 – 4.0	0.006
Accuracy	± (LOD + 1 %)	± 5 %	± 10 %	of reading

Parameter	Measuring range	Accuracy
Cyanuric acid	0 – 100 mg L <sup>-1</sup>	± 2 mg L <sup>-1</sup> or ± 5 % of reading, whichever is greater
pH (phenol red)	6.50 – 8.00	± 0.1

## Sensor Specifications Overview

### pH and Redox Potential:

Digital, maintenance-free sensors for a wide range of applications: potable to wastewater, swimming pool, cooling water

Poisoning-protected reference systems with solid electrolyte and clogging-resistant open junction diaphragm

#### Swansensor pH CT

Measuring range: 1–13 pH  
Resolution: 0.01 pH

Automatic temperature compensation with integrated sensor

#### Swansensor ORP CT

Measuring range: –400–1200 mV  
Resolution: 1 mV

Pt redox electrode with integrated temperature sensor for consistent data records

### Specific Conductivity:

Digital four-electrode sensor with Pt electrodes  
Wide measurement range  
Insensitive to polarization effects

#### Swansensor Shurecon CT

Measuring range: 0–100 mS/cm  
Resolution: 0.01 µS/cm  
(decreases incrementally from κ > 9.99 µS/cm)  
Accuracy: ±(0.2 µS/cm + 1.5 % of reading)

SWAN Analytical Instruments AG warrants these SWANSENSORS to be free from all defects for one year from the date of purchase.

**Please refer to the separate data sheet for the detailed specifications of the Chematest sensors.**

## Technical Data

### Instrument:

Multiparameter photometer with LED light source and digital sensor interface  
Graphic display with backlight: 64 x 32 mm  
Key pad with tactile keys  
Bluetooth 4.0 Low Energy interface  
Memory for 2700 data sets  
Languages: English, Chinese, Danish, French, German, Italian, Portuguese, Spanish, Swedish

Ambient conditions operation: 0–45 °C  
0–100 % rel. humidity (non-condensing)

Ambient conditions storage: –20–60 °C  
(Different specifications for reagents/sensors.)

Degree of protection: IP67  
CE- and FCC-conformity

### Dimensions, weight:

Powered by high-capacity lithium-ion battery for 5000 measurements or 5 days standby (auto power off after 10 min without input)  
Battery status indicator on display

Instrument: 10 x 7 x 22 cm, 390 g  
Carrying case: 46 x 12 x 38 cm, 3.1 kg (including content)